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# NOTICE OF ALLOWANCE AND FEE(S) DUE

22428

7590

07/09/2010

FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007 EXAMINER

SUTTON, DARRYL C

ART UNIT PAPER NUMBER

1612

DATE MAILED: 07/09/2010

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/588,718      | 05/15/2007  | Ernst V. Arnold      | 065611-0119         | 1962             |

TITLE OF INVENTION: NITRIC OXIDE-RELEASING POLYMERS

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES          | \$755         | \$300               | \$0                  | \$1055           | 10/12/2010 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

| appropriate. All further indicated unless correcte maintenance fee notifica  | correspondence includir<br>ed below or directed oth   | ng the Patent, advance of<br>herwise in Block 1, by (  | orders and notification of r<br>a) specifying a new corres   | naintenance fees will spondence address; as  | be mailed to the current<br>nd/or (b) indicating a sepa  | correspondence address as trate "FEE ADDRESS" for   |  |
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| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)   |   |  | Feet<br>pape   | (s) Transmittal. This ders, Each additional p  | certificate cannot be used f<br>paper, such as an assignme   | or domestic mailings of the<br>for any other accompanying<br>nt or formal drawing, must   |  |
| 22428  | 7590 07/09  | 0/2010   | nave   |  | f mailing or transmission.   |   |  |
| SUITE 500<br>3000 K STREET   |   |  | I he<br>Stat<br>addı<br>tran   | Certify that this es Postal Service with ressed to the Mail Semitted to the USPTC                                  | icate of Mailing or Trans<br>Fee(s) Transmittal is being<br>a sufficient postage for firs<br>top ISSUE FEE address<br>0 (571) 273-2885, on the d | mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.                       |  |
| WASHINGTON   | 1, DC 20007   |  |  |  |  | (Depositor's name)  |  |
|  |   |  |  |  |  | (Signature)   |  |
|  |   |  |  |  |  | (Date)  |  |
| APPLICATION NO.  | FILING DATE   |  | FIRST NAMED INVENTOR   | А  | TTORNEY DOCKET NO.   | CONFIRMATION NO.  |  |
| 10/588,718   | 05/15/2007  | •  | Ernst V. Arnold  | 065611-0119  |  | 1962  |  |
| TITLE OF INVENTION   | : NITRIC OXIDE-RELI   | EASING POLYMERS  |  |  |  |   |  |
| APPLN, TYPE  | SMALL ENTITY  | ISSUE FEE DUE  | PUBLICATION FEE DUE  | PREV. PAID ISSUE F   | EE TOTAL FEE(S) DUE  | DATE DUE  |  |
| nonprovisional   | YES   | \$755  | \$300  | \$0<br>1   | \$1055   | 10/12/2010  |  |
| EXAM   |   | ART UNIT   | CLASS-SUBCLASS   | J  |  |   |  |
|  | DARRYL C  | 1612   | 514-149000   |  |  |   |  |
| <ol> <li>Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</li> <li>Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</li> <li>"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</li> </ol>   |   |  | or agents OR, alternati<br>(2) the name of a singl<br>registered attorney or a<br>2 registered patent atto<br>listed, no name will be  | ne names of up to 3 registered patent attorneys 1  |  |   |  |
| 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.  (A) NAME OF ASSIGNEE  (B) RESIDENCE: (CITY and STATE OR COUNTRY) |   |  |  |  |  |   |  |
| Please check the appropr   | iate assignee category or   | categories (will not be p  | rinted on the patent):   | Individual 🖵 Corp  | oration or other private gro   | oup entity Government   |  |
| 4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies  |   |  | tb. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  A check is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). |  |  |   |  |
| 5. Change in Entity Sta  | tus (from status indicate<br>s SMALL ENTITY statu   |  | ☐ b. Applicant is no lon   | ger claiming SMALL   | ENTITY status. See 37 Cl   | FR 1.27(g)(2).  |  |
| NOTE: The Issue Fee an interest as shown by the  | d Publication Fee (if req<br>records of the United Sta  | uired) will not be accepte<br>tes Patent and Trademarl   | ed from anyone other than t  |  |  | ne assignee or other party in   |  |
| Authorized Signature   |   |  |  | Date   |  |   |  |
| Typed or printed name  |   |  |  |  |  |   |  |
| This collection of inform<br>an application. Confiden<br>submitting the complete<br>this form and/or suggest<br>Box 1450, Alexandria, V<br>Alexandria, Virginia 223  | tiality is governed by 35 d application form to the ions for reducing this but riginia 22313-1450. DC | CFR 1.311. The informati<br>JU.S.C. 122 and 37 CFR<br>E USPTO. Time will vary<br>rden, should be sent to the<br>D NOT SEND FEES OR | on is required to obtain or r<br>1.14. This collection is est<br>y depending upon the indiv<br>the Chief Information Office<br>COMPLETED FORMS TO  | retain a benefit by the<br>imated to take 12 min<br>idual case. Any comer, U.S. Patent and Tr<br>D THIS ADDRESS. S | public which is to file (and<br>nutes to complete, includin<br>ments on the amount of ti<br>ademark Office, U.S. Dep.<br>SEND TO: Commissioner   | by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450, |  |

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|----------------------------------|---------------|----------------------|--------------------------------|------------------|
| 10/588,718                       | 05/15/2007    | Ernst V. Arnold      | 065611-0119                    | 1962             |
| 22428 75                         | 90 07/09/2010 |                      | EXAM                           | INER             |
| FOLEY AND LA                     | ARDNER LLP    | SUTTON, DARRYL C     |                                |                  |
| SUITE 500                        |               | ART UNIT             | PAPER NUMBER                   |                  |
| 3000 K STREET N<br>WASHINGTON, I |               |                      | 1612<br>DATE MAILED: 07/09/201 | 0                |

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

|   | Application No.   | Applicant(s)  |  |  |  |
|---|---|---|--|--|--|
|   | 10/588,718  | ARNOLD ET AL.   |  |  |  |
| Notice of Allowability  | Examiner  | Art Unit  |  |  |  |
|   | DARRYL C. SUTTON  | 1612  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included nerewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  |   |   |  |  |  |
| 1. $\boxtimes$ This communication is responsive to <u>Applicant's response</u>  | <u>dated 03/01/2010</u> .   |   |  |  |  |
| 2. The allowed claim(s) is/are <u>3-5,7-12,14-31,33-37 and 49-5</u>   | <u>2</u> .  |   |  |  |  |
| <ul> <li>3. Acknowledgment is made of a claim for foreign priority unanalysis.</li> <li>a) All b) ☐ Some* c) ☐ None of the: <ol> <li>Certified copies of the priority documents have</li> <li>Certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>Certified copies not received:</li> </ol> </li> <li>Applicant has THREE MONTHS FROM THE "MAILING DATE".</li> </ul>  | been received. been received in Application No cuments have been received in this   | national stage application from the                     |  |  |  |
| noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF   |   |   |  |  |  |
| <ul> <li>5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.</li> <li>(a) including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached</li> <li>1) hereto or 2) to Paper No./Mail Date</li> <li>(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> <li>6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ul> |   |   |  |  |  |
| Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date See Continuation Sheet  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material  //Darryl C Sutton/ Examiner, Art Unit 1612  | 5. Notice of Informal P 6. Interview Summary Paper No./Mail Dat 7. Examiner's Amendr 8. Examiner's Stateme 9. Other /Frederick Krass/ Supervisory Patent Examiner | (PTO-413), te nent/Comment ent of Reasons for Allowance |  |  |  |

Continuation of Attachment(s) 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date: 10/12/2007, 03/11/2010 & 05/17/2010.

#### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Benny Berkowitz on 06/11/2010.

- 1) Claim 5, line 6, "not an imidate or thioimidate" has been deleted.
- 2) Claim 5, line 6, immediately following "R<sup>1</sup>" there has been inserted -- is selected from the group consisting of an electron withdrawing group, a cyano group, an ether, a thioether, and a non-enamine amine --.
- 3) Claim 25, line 2, immediately following "polyarylates," there has been inserted -- polyamides, --.
- 4) Claim 37, line 3, immediately following "polymer" there has been inserted -having the formula  $R^3$ - $C(R^1)_x(N_2O_2R^2)_y$ , wherein x is an integer from 0 to 2 and y is an
  integer from 1 to 3, and the sum of x plus y equals 3; wherein  $R^1$  is selected from the

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group consisting of an electron withdrawing group, a cyano group, an ether, a thioether, and a non-enamine amine; wherein R<sup>2</sup> is selected from the group consisting of a countercation and a protecting group on a terminal oxygen; and where R<sup>3</sup> is a phenyl of said phenyl containing polymer, and said phenyl is either pendant from the backbone of said polymer or part of the backbone of said polymer—

- 5) Claim 37, lines 4-7, "a carbon-bound diazenium diolate nitric oxide donor moiety that is not an imidate or thio imadate; wherein the nitric oxide donor moiety is linked to the polymer to produce a carbon-bound diazenium diolate moiety;" has been deleted.
  - 6) Claim 27, last two lines, "from the donor molecule" has been deleted.

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance:

Applicant's have prepared a diazenium diolate containing polymer and incorporated it into a composition. The diazenium diolate functionality is covalently bonded to a pendant phenyl moiety or a phenyl moiety that is part of the backbone of the polymer through a benzylic carbon. The closest prior art, Cafferata, US 2003/0083739 teaches compositions comprised of phenyl containing polymers, such as polystyrene, and nitric oxide releasing compounds in general; but does not teach the

Art Unit: 1612

structure of the resulting polymer and nitric oxide releasing compound combination or appropriate methods of making the composition of the instant application.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

/Darryl C Sutton/

Examiner, Art Unit 1612

/Frederick Krass/

Supervisory Patent Examiner, Art Unit 1612